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ABSTRACT

Case studies were conducted to assess the personal learning styles and behaviors of elementary school children to provide teachers the opportunity of using prescribed teaching techniques to match students' styles. Six groups of behaviors were identified: (1) students demonstrate little internal control and are likely to act out and create disturbances; (2) students are resistant to authority and imposed structure; (3) students are fearful and avoid situations involving risks; (4) students are easily distracted; (5) students are concerned with adult approval and show respect for authority; and (6) students have internal controls, can be relied upon to stay on-task, and respond well to self-managed study plans. The behavior characteristics of each of the six groups are described. Treatment schedules for teachers to use in a classroom setting of each type of student are described in detail. The results of their application by teachers in eight case studies are presented and discussed. (JD)

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# ADAPTING TEACHING STYLES TO LEARNING STYLES

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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The San Jose State University Teacher Corps Project is currently in its third year at the William R. Rogers Elementary School (K-5) in San Jose, California. The project began in Cycle Ten (1975) with a research adaptation thrust. During the first two years several training systems and a computer-assisted data feedback system were developed on site. When the Twelfth Cycle Project began in Fall semester, 1977, three research-based components were included--training in Models of Teaching (Joyce & Weil, 1972), teacher self-analysis, and pupil learning styles. This paper reports on preliminary results obtained in the pupil learning styles component.

## Assessment of Pupil Learning Styles

During the months of September, October and November the learning styles of all children in the William R. Rogers School were assessed using the Coping Analysis Schedule for Educational Settings (CASES) (Spaulding & Papageorgiou, 1977). A short form of CASES is given in Table 1.

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Table 1

The Coping Analysis Schedule for Educational Settings (CASES)

(Brief Form)

| No. | Description (Abbreviated) |
|---|---|
| 1 | Aggressive, hurtful, destructive behavior |
| 2 | Negative attention-getting behavior |
| 3a | Controlling others in a pro-social manner |
| 3b | Controlling others in a self-serving manner |
| 4 | Resisting, delaying, defensive checking |
| 5a | Appropriate self-directed, independent activity |
| 5b | Inappropriate self-directed, independent activity |
| 6a | Paying close attention in accordance with teacher expectations |
| 6b | Paying close attention to events unrelated to the task at hand |
| 7a | Integrative sharing and helping in accordance with teacher expectations |
| 7b | Integrative sharing and helping in conflict with teacher expectations |
| 8a | Integrative social transactions in accordance with teacher expectations |
| 8b | Integrative social transactions in conflict with teacher expectations |
| 9a | Integrative seeking and receiving help in line with teacher expectations |
| 9b | Integrative seeking and receiving help in conflict with teacher expectations |
| 10 | Following directions and teacher expectations obediently and submissively |
| 11 | Observing passively and checking on noises and movements of others |
| 12 | Responding to internal stimuli and not in close contact with the environment |
| 13 | Physical withdrawal and avoidance of involvement in classroom activities |

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This measure of student "coping" behavior is comprehensive and categorizes all observable acts in the classroom in terms of dimensions of normal personality development and socialization. Its categories are based on ego theory and reflect a number of concepts of social learning. Student behavior is sorted into one or another of 13 basic categories. Six categories are further divided into "appropriate" or "inappropriate" behaviors as determined by the teacher's expectations and standards for the setting.

The term "coping" was taken from Murphy's (1956) book, Methods for the Study of Personality in Young Children, and many of the original ideas for the instrument came from sections of the book written by Lerner. It was assumed, by Lerner, that ego-patterns result from transactions with the environment. He felt that: "Given an individual child's selective manner of handling on the one hand his failures, defeats, frustrations, and on the other hand his successes, victories, gratification, one ought to be able somehow to define such ego-organization in the making" (p. 271). The CASES instrument was, therefore, designed to be a measure of ego-related overt response patterns, and as such, it is particularly well suited to classroom research since it permits the assessment of overall socialization, as well as specific sub-categories of behavior and generic coping "styles," rooted in personality development theory. Behavior frequencies in the 19 separate, low-inference categories are clustered into eight sub-groupings of categories based on factor-analytic studies of large samples of normal classroom behavior to obtain the coping "style" scores. The visibility thresholds for each style were empirically developed so that a coefficient of 1.00, considered to reflect a dominant or visible behavior pattern, represents a point one standard deviation above the mean obtained for each style in a sample of approximately 2700 students in grades 1 through 12. The eight coping styles, as currently structured, are as follows:

Style A: Dominative, active aggressive, annoying, bothering, controlling, manipulating (CASES 1, 2, 3b, 9b)

Style B: Resistant, passive-aggressive, delaying, peer-oriented, off-task (CASES 4, 5b, 7b, 8b)

Style C: Passive, withdrawn, avoidant, dreamy (CASES 12, 13)

Style D: Peer dependent, distractible, off-task (CASES 6b, 11)

Style E: Attentive, adult-oriented, compliant (CASES 6a, 7a, 9a)

Style F: Assertive, socially integrative, task-oriented (CASES 3a, 8a)

Style G: Appropriately self-directed, task-oriented, independent, self-motivated (CASES 5a)

Style H: Conforming, passive, submissive to directions (CASES 10)

When each of the coping styles of the pupils in a given classroom in the William Rogers School was assessed during the opening months of the academic year 1977-78 the resulting pupil style scores were shared with the classroom teachers. In these conferences classroom management procedures appropriate to each pupil's behavioral style (A through E) were outlined. The teachers were then asked to select one or two children to become the subjects of case studies. The purposes of the case studies were to provide opportunities for the classroom teachers to gain experience in the use of the six basic classroom management schedules designed for Coping Styles A through E and to provide continuous data collection in each of the 20 classrooms in the school for the purposes of overall evaluation of the effectiveness of the training procedures used in the learning styles component.

Classroom Management Schedules Designed to Match Learning Styles

The classroom management schedules used in the Rogers School were developed in previous studies (Spaulding, 1978) and have been found generally effective in assisting

pupils to achieve responsible self-direction within the school setting. The six basic sets of curricular and mangement suggestions (to be described in subsequent sections of this report) were obtained by empirical studies of more than 2000 children and their teachers over a period of approximately seven years in Illinois and New York. The treatments were further refined and modified in experimental studies in the North Carolina Durham Education Improvement Program (Spaulding, 1971a, 1971b; Spaulding & Papageorgiou, 1972) and field-tested in public school settings in California (Showers, 1974; Seacrist, 1976; Pruitt, 1977).

Description of Style A Behavior and Suggested Classroom Program for Style A Pupils

Style A students demonstrate little internal control and are likely to act out and create disturbances. They may become verbally or physically aggressive and frequently attempt to manipulate other students or the teacher to obtain what they want. They are willing to incur the disfavor of others in order to get attention. They cannot be relied upon to stay on-task without close supervision and a high degree of structure (that is, specific procedures and detailed tasks).

The descriptors which characterize these students are : aggressive, annoying, and bothering (CASES 2), abusive and hurtful (CASES 1), destructive (CASES 1), dominative, controlling (CASES 3b), and manipulative (CASES 3b, 9b).

Suggested classroom program (also called a "treatment program" or "schedule"):

1. Set strict, narrow limits (set a specific routine to follow, step-by-step). Give no choices, either academically or socially. Set specific, concrete academic tasks.
2. Assign to a specific work station (or learning center) to work alone.
3. Instruct individually or in groups of six or fewer.
4. Weaken all unacceptable behavior by responding immediately by careful and deliberate use of a suitable time-out procedure (i.e. by taking away freedom to move about, have an object, hear what others are saying, being able to see or observe what others are doing, etc.).

6. Reinforce (strengthen) all emerging desirable behavior. Do not overlook acceptable behavior. Mention it and praise it. Use social reinforcers as well as tokens and other concrete rewards.
7. Ignore visual wandering and distraction. Disregard daydreaming. Ignore delay and wasting of time.
8. Ignore attempts to manipulate the teacher (yourself). Do not, however, ignore attempts to manipulate other students or the aides in the room. Use a gentle time-out procedure to weaken such attempts.

Description of Style B Behavior and Suggested Classroom Program for Style B Pupils

These students are resistive to authority and to imposed structure. They prefer to do things in their own way and at their own pace. They are generally peer-oriented and talkative. They cannot be relied upon to stay on-task in social settings. However, they have strong drives to maintain control over their lives, to be productive, and to exert power. Given no confrontation with authority they can work well alone on tasks set broadly, with the focus on end products to be created in their own way.

Many of these students can be readily co-opted into cooperating with the teacher (or another school authority) by a restructuring of the instructional program to make use of their considerable concern for achievement and self-direction. The classroom treatment suggestions presented below have been demonstrated in well documented case studies (Spaulding, 1978) to be effective in assisting these students to assume more appropriate coping styles--that is, Styles E, F, or G (as appropriate to the setting).

The descriptors which characterize these students are: inappropriately self-directed (CASES 5b), inappropriately socially active (CASES 7b, 8b), peer-oriented

and talkative (CASES 7b, 8b), resistant to authority (CASES 4), and delaying and non-conforming (CASES 4).

Suggested classroom program for Style B pupils:

1. Set relatively broad limits (do not set a strict routine). Provide many non-social choices in terms of the conditions and circumstances of work and the task undertaken.
2. Assign to a specific work station (or learning center) to work alone.
3. Use indirect teaching techniques, avoiding direct commands and confrontations.
4. Do not supervise closely but remain nearby to reinforce appropriate behavior by giving novel material to use or responsibilities commensurate with task performance.
5. Ignore resistance and delay but weaken active aggression or manipulation by careful use of "time-out" (e.g. loss of freedom to move about, have an object, hear, etc.).
6. Reinforce all emerging task-oriented, productive behavior by giving bits of freedom, physical objects of a desirable nature (including tokens), or privileges. Avoid giving praise or social approval since it conveys submission to authority and can be a threat to the independence these students seek to maintain.
7. Ignore dependent, submissive, and passive conformity if they occur (and they are unlikely to occur).
8. Ignore attempts to manipulate the teacher (yourself), but not others. As in the case of Style A students, use a gentle time-out procedure to weaken such attempts to manipulate other persons.

Description of Style C Behavior and Suggested Classroom Program for Style C Pupils

Style C pupils are fearful and they avoid situations involving risks. They will withdraw if confronted with any social or academic threat. They will not initiate disturbances but they will participate as observers. They cannot be relied upon to remain actively on-task without close support and a high degree of structure.

If they are blocked during seatwork, they will await assistance rather that actively seek solutions. If they become involved in a disturbance with other students they will withdraw rather than seek adult assistance. They are fearful of retribution.

Style C students are likely to find solace in their own thoughts. They tend to daydream and respond to internal stimuli when left alone.

Suggested classroom program for Style C pupils:

1. Set narrow, clearly defined limits. Set a specific routine to follow, step-by-step. Give no academic choices, but allow appropriate social choices (that is, allow the student to seek assistance from reliable pupils).
2. Set concrete academic tasks. Use prototype models for copying. Provide structure at all times. Do not use discovery techniques. Instead use direct, expository methods of instruction.
3. Assign to a specific work station near supportive, task-oriented, reliable (Style F) peers.
4. Instruct individually or in groups of six or fewer.
5. Stay nearby to provide structure and support for risk-taking.
6. Use "pump priming" (that is, physically assist the student through a procedure) to get the behavior started--then reinforce it. Praise the student for the actions set in motion by the teacher (yourself).
7. Do not attempt to weaken behavior. Preempt it instead. Do not punish. Preempt inappropriate behavior by waiting for incompatible, desirable behavior to occur--then strengthen that behavior. Ignore aggressive or

or annoying behavior (if it occurs). The first risk-taking of a Style C youngster is likely to be inept. Shape the newly emerging, active behaviors by selective attention--rather that punishing the excesses that may accompany them.

8. Ignore withdrawn or adult-dependent behavior. Don't respond to clinging, for example. Await the risk-taking of these pupils and create the context for it to occur. That is, make it safe to venture forth.

Description of Style D Behavior and Suggested Classroom Program for Style D Pupils

These students are easily distracted. They respond readily to noises and movements in the environment. They watch other students work and they are easily co-opted into inappropriate activities by more dominant students. They frequently copy the work of others and are likely to wait for their peers to produce models for them to copy.

Style D pupils are concerned with group (peer) approval. They are willing to follow the lead taken by the more skilled or powerful students in the class. They are less concerned with authority and approval from adults. These students often seek out satisfying activities by watching others in the room.

Suggested classroom program for Style D pupils:

1. Set narrow, clearly defined limits. Set a specific routine to follow, step-by-step. Provide clear models to follow. Do not give any social choices. That is, do not allow social interaction.
2. Assign concrete academic tasks involving no more than one or two choices. Avoid complex or abstract academic assignments. Gradually increase academic choices (such as which task to undertake first, or when to complete an assignment, or which of two tasks to choose to undertake) as ability to attend to task increases.

3. Assign to a specific work station to work alone. When task-orientation increases assign tasks involving use of reference materials and permit movement to and from the resource center. Make use of Style F peers when tutoring is appropriate.
4. Instruct in groups of six to ten.
5. Stay nearby to apply reinforcement (and sanctions such as time-out, if necessary).
6. Weaken all unacceptable behavior (for example, aggression if it occurs) by responding immediately by careful and deliberate use of a suitable time-out procedure (i.e. by taking away freedom to choose, to have an object, to hear what others are saying or see what they are doing, etc.).
7. Reinforce all emerging desirable behavior. As in the case of Style A pupils, do not overlook acceptable behavior. Mention it and praise it. Use social reinforcers as well as tokens and other concrete rewards. Give material rewards as well as special privileges as a consequence of staying on-task.
8. Ignore teacher-dependent behavior. Ignore, also, attempts to manipulate the teacher (yourself) and ignore delay in working or getting started on a task.

Description of Style E Behavior and Suggested Classroom Program for Style E Pupils

Style E pupils are concerned with adult approval and they show respect for authority. They want to know what the rules are and they want to do what is expected by those in positions of authority. These students frequently become anxious if they are not clear about what is expected of them. They will respond to clear statements of goals and procedures. They prefer to have clearly defined assignments with little ambiguity regarding the steps to take to complete the tasks assigned.

Style E students will not be able to operate for extended periods of time without teacher support and approval. They can be relied upon to follow instructions but they need frequent reassurance that they are, in fact, doing what is expected of them.

The behavioral descriptors for these students are: compliant, dependable, studious, conforming, adult-dependent. They can be depended upon not to cause disturbances and will not cause others to be distracted from the assigned tasks. The CASES categories that characterize these students are 6a, 7a, and 9a.

Suggested classroom program for Style E students:

1. Set relatively broad limits. Permit many academic and social choices, both in terms of the conditions and circumstances of work but also the task to be undertaken. Do not set a strict routine, but increase structure and reduce choice when anxiety occurs or performance slackens. If bids are made for structure, provide it--but gradually increase the amount of self-direction required by focusing on alternative solutions to problems. Give special attention to unique solutions provided by students in contrast to solutions which conform to algorithms or patterns provided by the text or other authorities.
2. Permit and encourage Style E students to select their own work stations and companions.
3. Instruct in groups of 10 to 12 when introducing new concepts or skills. Encourage discussion and peer interaction regarding the concepts under study. Use concept acquisition teaching strategies to teach new ideas. Avoid didactic or rote procedures with these students. Encourage group problem-solving.
4. Do not supervise closely, but return periodically to reinforce productivity, innovation, independence, and choices. Be selective; reinforce intelligent

choices and worthy production.

5. Withdraw freedom to make choices (both academic and social) as needed to control misuse of time and materials. After a period of a day, restore freedom to make such choices.
6. Reinforce all task-oriented academic or socially appropriate behavior by giving increased degrees of freedom to operate within the school setting. Ignore minor disturbances and inappropriate social interaction.

Descriptions of Styles F and G and Suggested Classroom Program for Style F and Style G Students

Both Style F and Style G pupils have internal controls. Style F students prefer to work with other pupils if given the opportunity. Style G students prefer to work alone on most tasks. Some Style G students lack the social skills necessary to interact successfully with their peers and they may choose to work alone to avoid embarrassment.

Style F and G pupils can be relied upon to stay on-task. Most of them, also, have considerable initiative and often seek novel ways of solving problems. They tend to enjoy the opportunity to test their mettle.

Style F students are frequently willing to participate as classroom aides and many enjoy tutoring younger children. They can be depended upon to follow through on assignments outside the classroom and are frequently eager to bring in additional materials and resources to enrich the courses of study in the classroom. Both Style F and G students respond well to self-managed study plans. They enjoy the opportunity for problem-solving and self-directed learning.

Suggested classroom program for Style F and/or Style G students:

1. Set very broad limits. Permit wide latitude for academic and social choices. Use self-managed study or work plans to permit self-direction and encourage responsible independence. If possible, create the oppor-

tunity for these students to use the entire school building, study centers, the library, and the surrounding community as resources available to them as they follow their approved work plans.

2. Permit and encourage Style F pupils to select their own tasks, work stations, task procedures and companions. Reinforce independence and responsible self-direction. Create opportunities for social interaction around academic tasks.
3. Look for socially integrative behavior in Style G students. Reinforce such integrative behavior (CASES 8a, 3a) when it occurs. If Style G (CASES 5a) persists in situations when it is appropriate to be socially integrative, assign Style F students to work in pairs with Style G students. Allow Style G students to select the Style F pupils they choose to work with.
4. Do not instruct directly. Set academic tasks and goals in terms of the parameters of problems to be solved. Describe the end product to be achieved, not the process for achieving it. Provide support and structure as needed to foster discovery of concepts, principles, and generalizations. Discovery teaching, role playing, synectics (enhancing creativity), and simulation are suitable vehicles for teaching these students.
5. Do not supervise closely. Schedule periodic seminars and conferences to review their activities and the results of their research and creative efforts. Create forums for them to share their findings and productions. For example, create a class journal in which creative writing can be published and circulated within the school and community.
6. Reinforce cognitive analysis, evaluation, and application of principles learned. Avoid giving examinations which focus on approved solutions to textbook problems. Instead create examinations which require the

application of principles to the solution of problems found in the contemporary environment of the students.

Description of Style H Students

Style H students are submissive to authority and externally motivated to remain on task. When not supervised or directly instructed they will demonstrate other coping styles. Their preferred styles cannot be determined while they are closely supervised or instructed directly. They submit to the authority of the teacher (or other school personnel) but they may cease working on school tasks when left on their own.

Students who show Style H when closely directed or supervised may demonstrate any one of the Styles A through G when they are more on their own. A classroom program which keeps students in Style H does not encourage the development of internal controls.

The descriptors for Style H are conforming, passive, and submissive to authority (CASES 10). To determine the appropriate treatment for each student observed to be in Style H, create a less highly structured, less closely supervised setting and observe the students again. Once the student's preferred coping style is discovered, use the treatment suggested for the specific style found. Each of the suggested treatment schedules is designed to foster self-directed, task-oriented, socially integrative, productive activity.

Suggested procedure for the management of Style H students. The first step is to observe the pupils who show Style H in less closely supervised, less highly structured, non-teacher-directed settings. Look for each student's preferred style, then treat for the predominant style found.

If Style H persists even when the student being observed is not supervised or directly instructed, use the treatment schedule for Style E. It is the one most likely to be suited to his or her learning style.

## Results of Case Studies

Eight case studies of students in seven classrooms were selected to illustrate the feedback system and the results obtained during the current academic year. Two of the eight pupils studied were mainstreamed on the first day of school. They had formerly been assigned to a learning disabilities class in the same building.

On each of the graphs presenting data from the CASES observations two lines were drawn--one representing the Coping Style selected for treatment by the teacher and one representing the combination of Styles E, F, and G. The three more appropriate Styles E, F, and G were combined in these graphs since the various settings in which the data were gathered are combined in the graphs assembled for this report. In some settings Styles G or F would be most suitable; in other settings, Style E would be more appropriate. The addition of the three Style Coeffiecients gives the best estimate of appropriately active, task-oriented behavior.

## Graphs of the Eight Case Studies

Figures 1 through 8 present the CASES Style data obtained for the period September through February for eight case studies of students in seven classes.

FIGURE 1. CASES Style Data for a Second Grade Student Showing Style B.

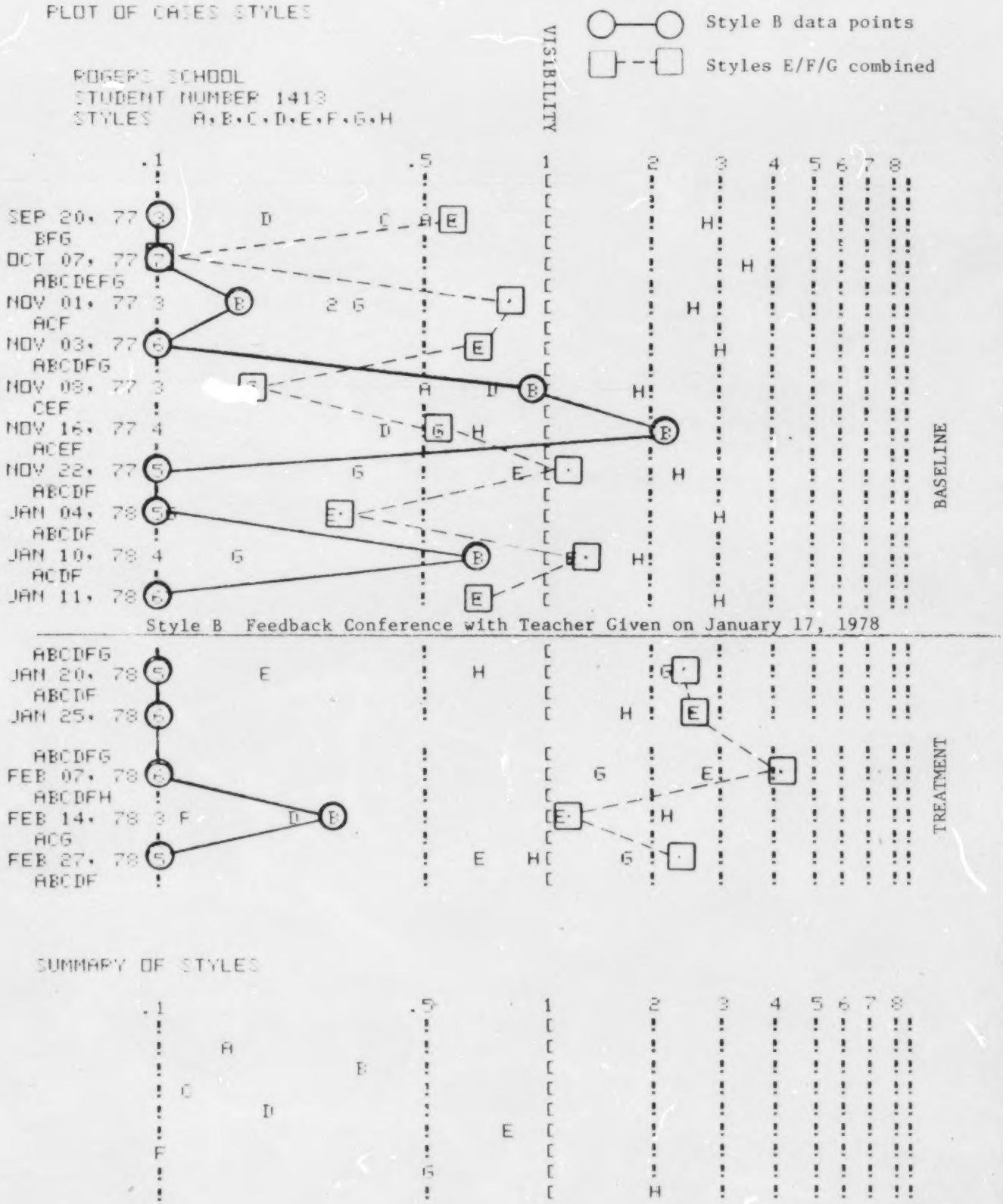
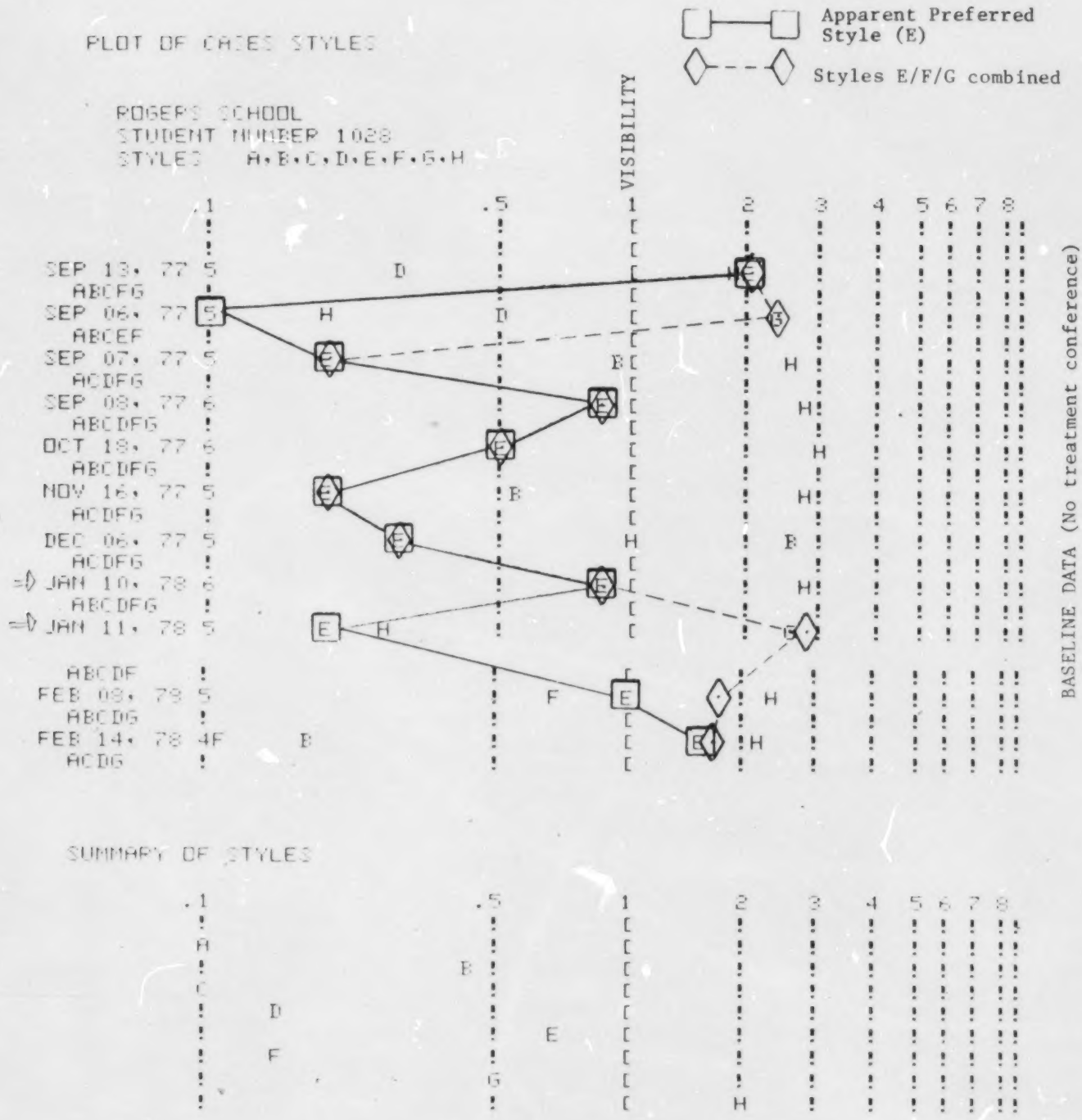
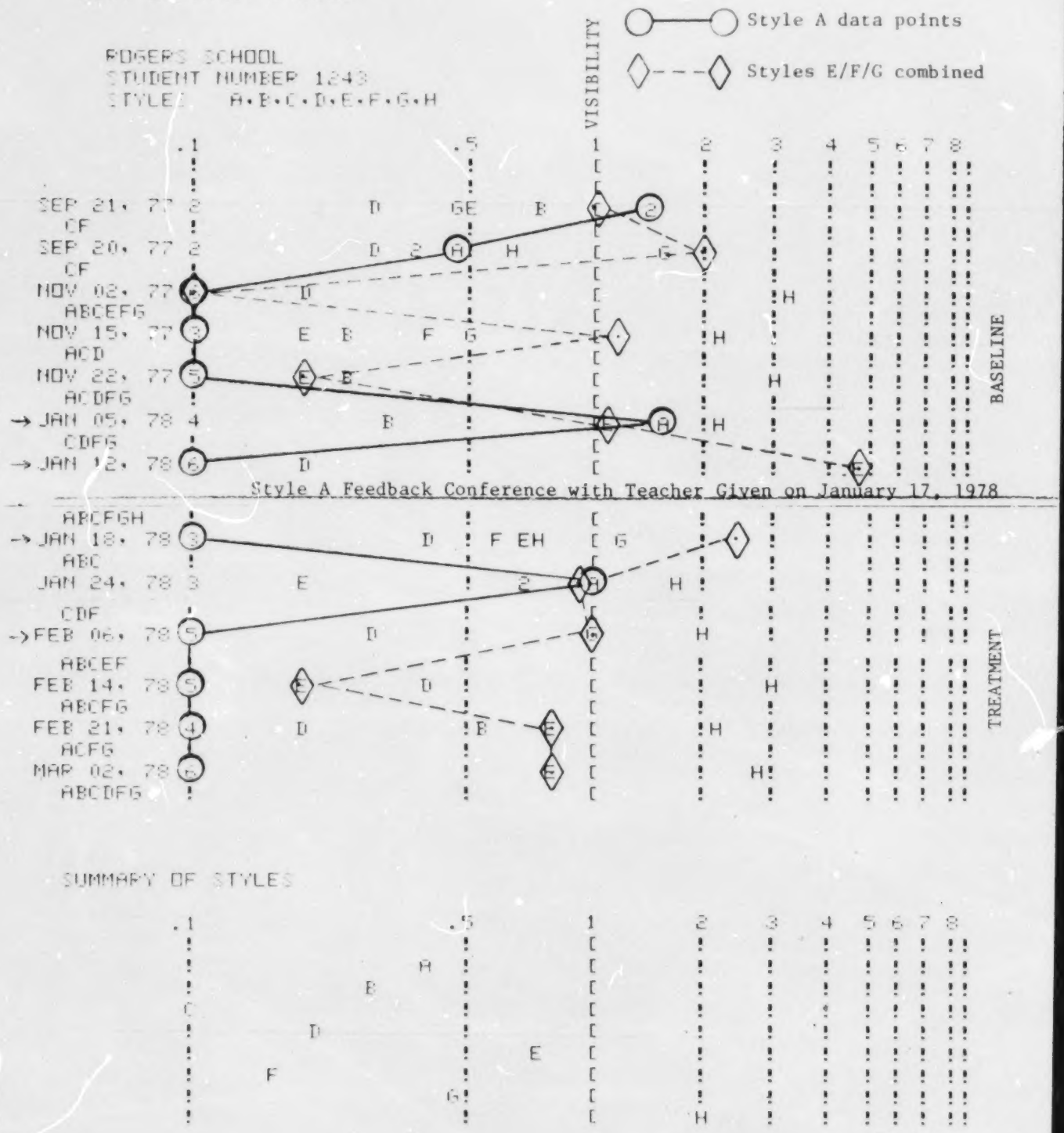


FIGURE 2. CASES Style Data for a Second Grade Mainstreamed Student.




NOTE: No specific problem mentioned by the teacher. The suggested treatment given to the teacher in September was the treatment for Style E. This student was tracked because he was mainstreamed.

FIGURE 3. CASES Style Data for a First Grade Boy Showing Style A Tendencies.




NOTE: The teacher requested assistance for Style A behavior which appeared from time to time and had become a problem for the teacher. The results of the treatment indicate that the case study child has not yet developed internal controls. He is conforming as a consequence of imposed constraints and performance requirements (Style H).

FIGURE 4. CASES Style Data for a K/1st Girl Style B Tendencies.

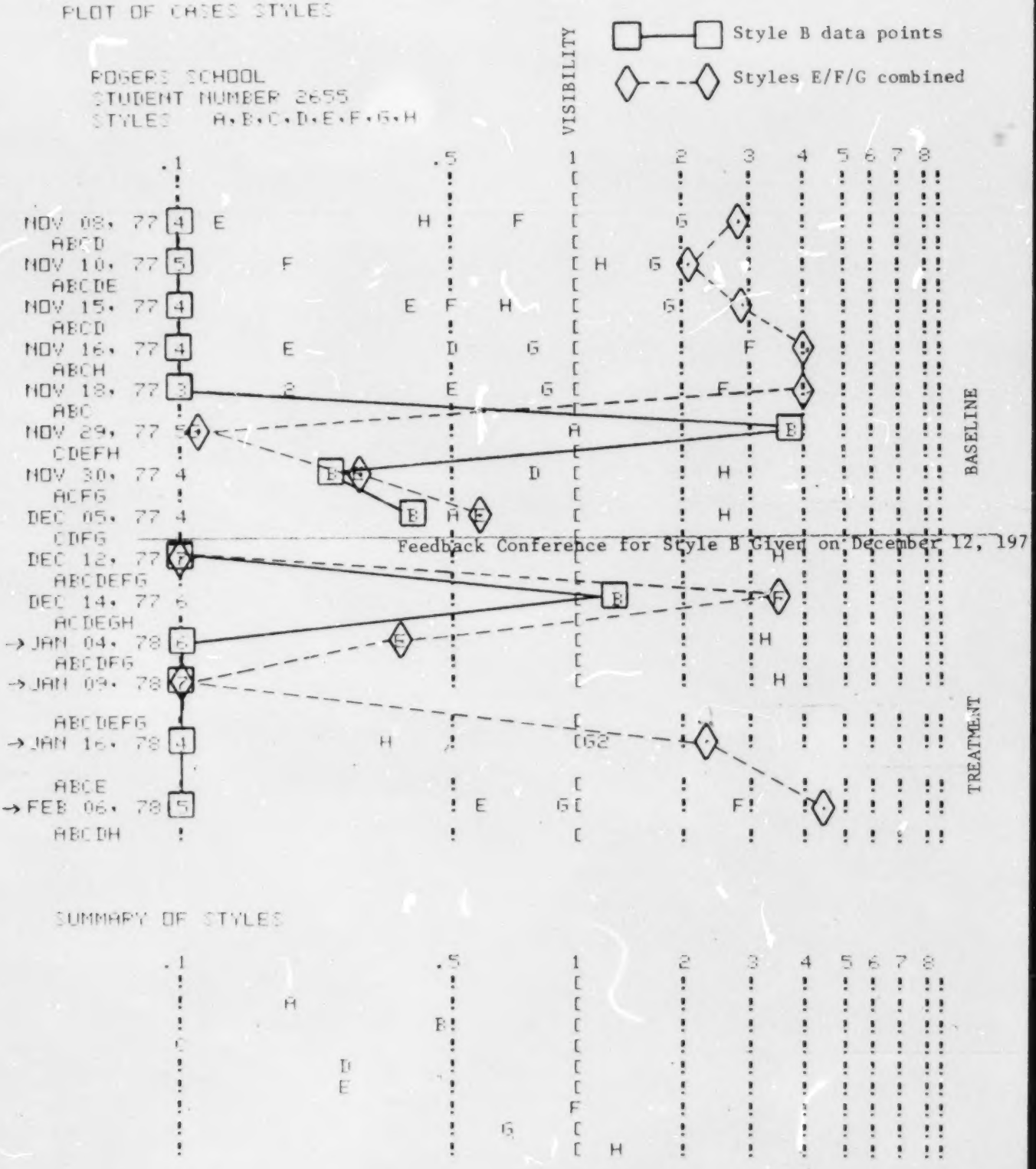
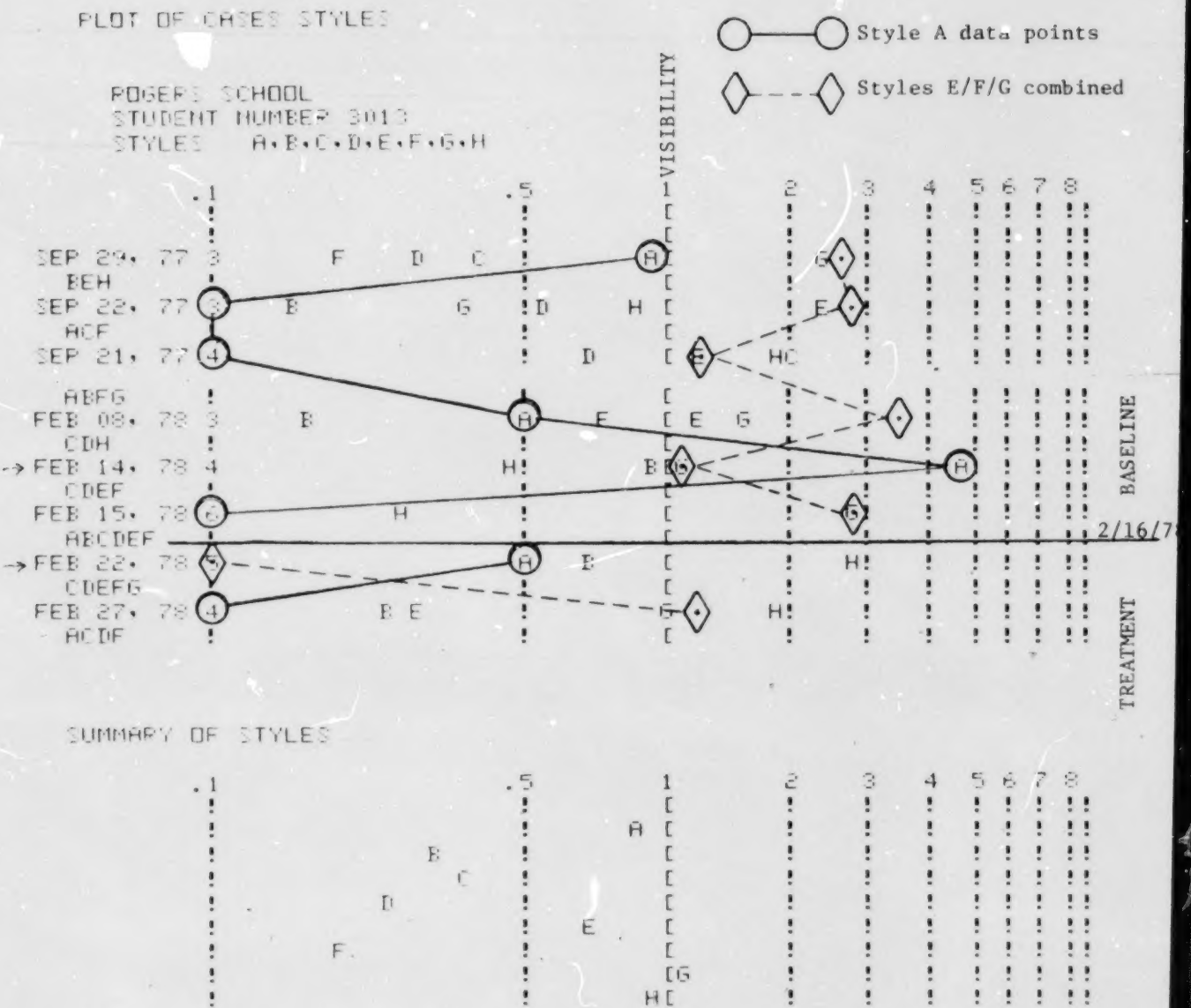
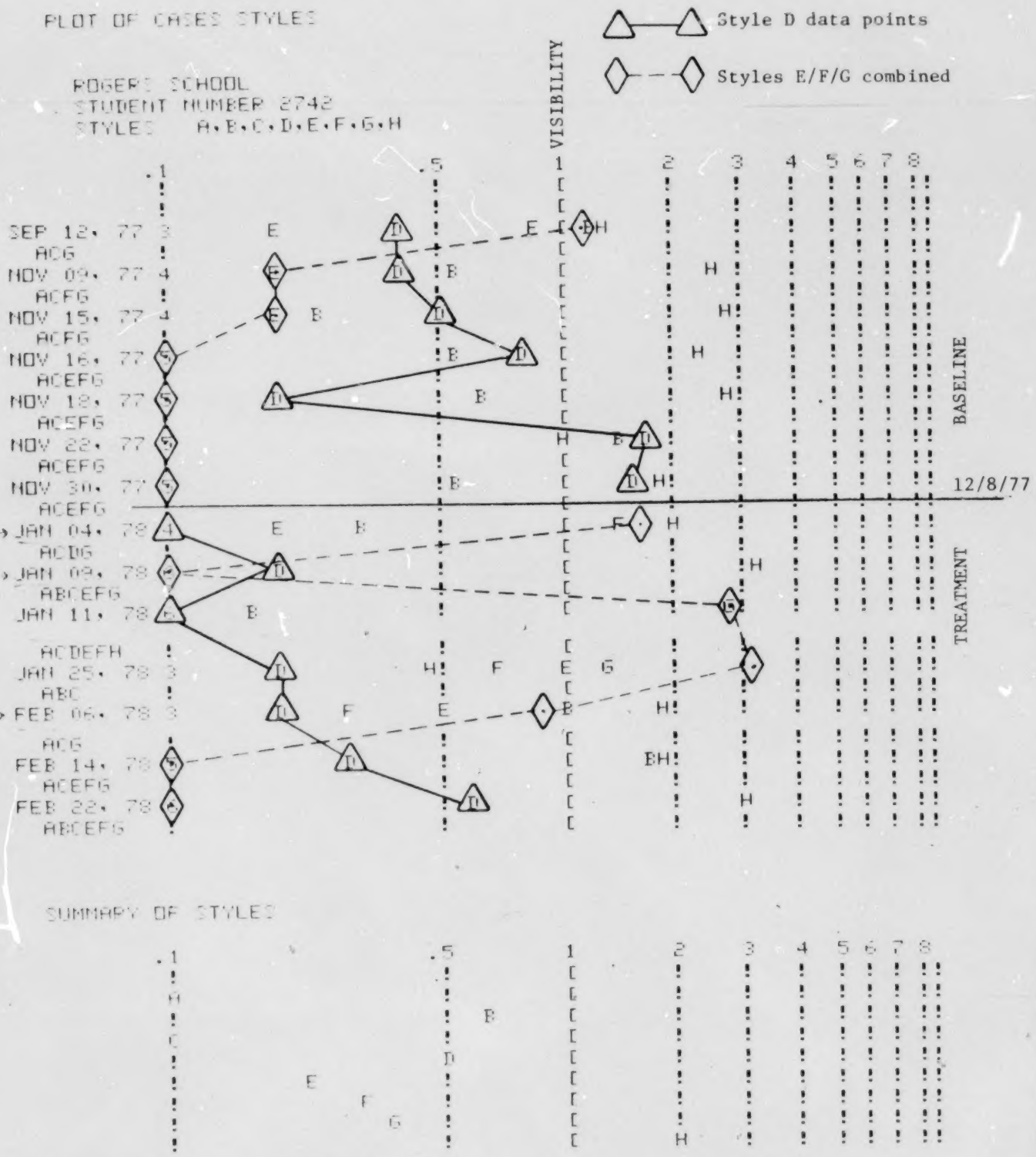


FIGURE 5. CASES Style Data for a Kindergarten Boy with Style A Tendencies.



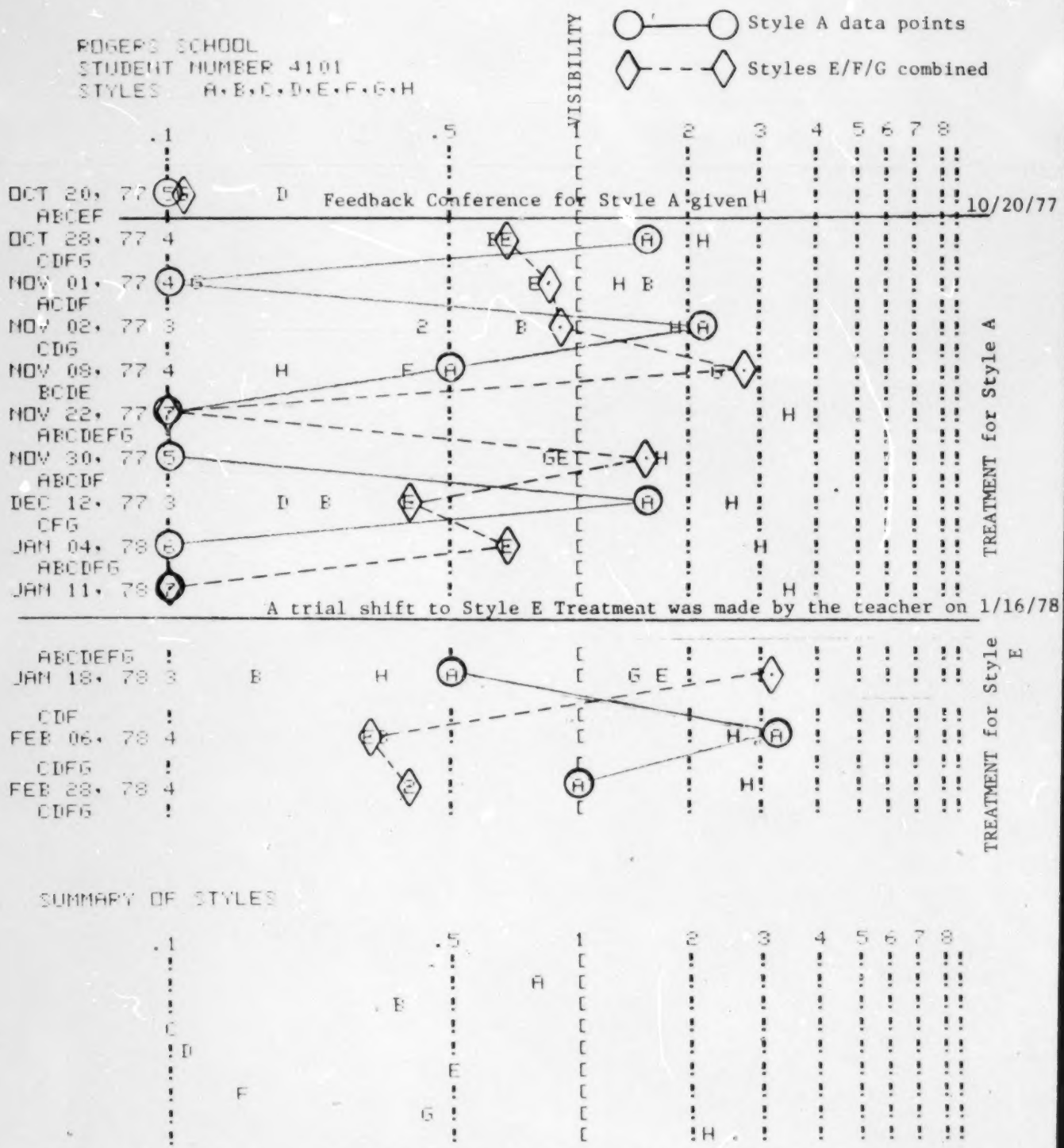

NOTE: The teacher asked for assistance and was given feedback on the Style A treatment schedule on February 16, 1978.

FIGURE 6. CASES Style Data for a Third Grade Girl with Style D Tendencies.



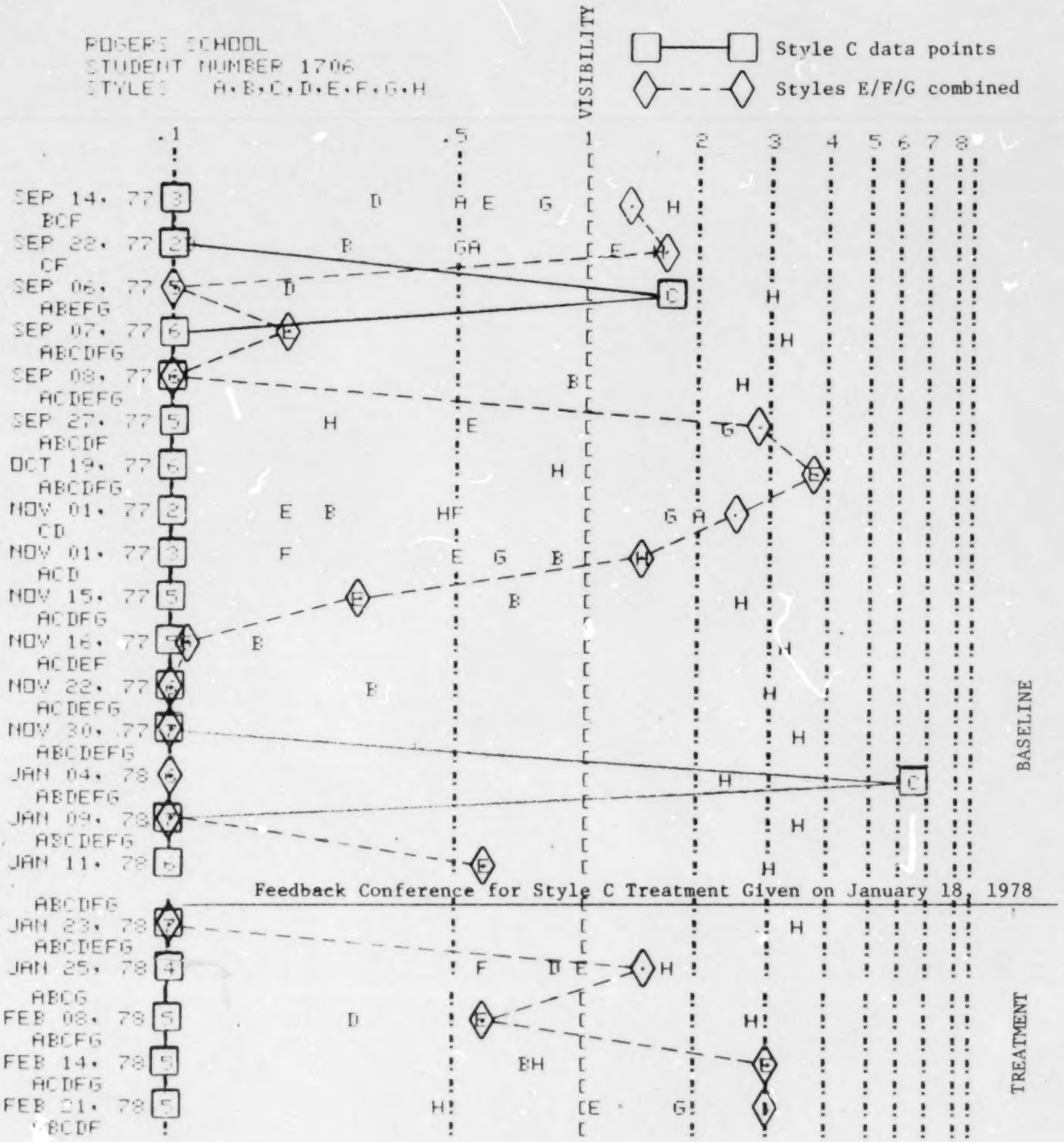

NOTE: The feedback conference for Style D was given to the teacher on December 8, after a request for assistance was received from the teacher.

FIGURE 7. CASES Style Data for a Third Grade Girl Showing Style A.




NOTE: These CASES data indicate that the shift to Style E treatment was premature. Although Style A behavior was not observed in the first two weeks of January, the data gathered during the second half of January and in February indicate that this third grade girl does not yet have internal controls. The treatment program for Style A behavior should be restored.

FIGURE 8. CASES Style Data for a Fifth Grade with Style C Tendencies.




NOTE: This Fifth Grade boy was mainstreamed at the beginning of the fall semester. Data were taken on all mainstreamed students to evaluate their performance regardless of the presence or absence of behavioral problems in the classroom.

Discussion

The CASES data presented in Figures 1 through 8 demonstrate that some of the teachers were able to apply the suggested treatment schedules with success. The more successful cases were illustrated in Figures 1 and 8 (Students 1413 and 1706). The results for Student 1243 (Figure 3) were mixed. Style A behavior diminished quickly and was not observed during visits to the classroom in February and March, but Style H remained high and the totals of Styles E/F/G did not increase.

The results for Student 2655 (Figure 4) were a bit more successful. Not only did Style B diminish after the onset of treatment, but after a few weeks Style H began to drop and the combined total of Styles E/F/G rose to a very high figure.

In the case of Student 3013 (Figure 5) the treatment was in effect for only a short time and the results are not yet clear. Although the amount of Style A quickly diminished, there was a lowered expression of Styles E, F, and G. Style H also rose to new highs during the treatment period. This type of response is not unlikely when a treatment is instituted and within a few weeks the effects will be more clearly determined. The initial response of the youngster is appropriate and with the reinforcement of Style E, F, and G behaviors it is likely that the Style H coefficients will again diminish.

The results for Student 2742 (Figure 6) were initially very encouraging. Style D behavior dropped to zero or near zero and the totals of Styles E/F/G rose to take the place of the formerly predominant Style H behavior. Within a few weeks, however, Style D began to rise, Style H became dominant again, and the total of E, F, and G were zero. An examination of the teachers application of the Style D classroom management program indicated that she had at first used the recommended schedule and had then relaxed her efforts and reverted to her former

management procedures. Additional conferences with the teacher of this case study child may again reverse the unfavorable pattern that currently appears in Figure 6.

The teacher of Student 4101 (Figure 7) was the first teacher to attempt to make the shift from the first treatment recommended to a second one based on changes resulting from the first program. The results, however, indicate that the shift to Style E treatment was premature. Style A behavior reappeared in strength and there were decrements in the totals for Styles E, F, and G. The results clearly indicate that a return to Style A treatment is most appropriate at this time. Both the reappearance of Style A and the continued high values for Style H indicate that this youngster has not yet developed sufficiently strong internal controls.

The two mainstreamed children were Students 1028 and 1706. The findings for these two boys, one a second grader and the other a fifth grader, are most encouraging. Although Style H remains high in both cases, the totals for Styles E, F, and G are frequently visible. Since the treatment conference was held with the teacher of Student 1706 (Figure 8) the combined total for E/F/G was visible three out of five observation sessions. In the case of Student 1028 (Figure 2) the total of E/F/G was visible on the last three visits to the classroom.

Aside from demonstrating the benefits which accrue to the pupils in these studies, the findings presented in these eight graphs demonstrated the utility of the computer-assisted feedback system and the sensitivity of the CASES instrument to on-going changes in the behavior of children in public school classes. These particular case studies are useful primarily as a means for assisting teachers to achieve mastery in the application of the six classroom management schedules.

The overall effects of the year-long training will be assessed by examining the learning styles of all the children in the school at the end of the academic year. The children picked by the teachers for subjects of special study represent problem youngsters and they are not representative of the children in the classes in which they are enrolled or the school as a whole. It is expected, however, that the skills learned by the teachers in applying the specific management techniques designed to assist the case-study pupils to acquire more suitable learning styles will generalize to the management of all the children in the twenty classes of the school. The test of this assumption will be found in the CASES data to be gathered in April and May of this year.

## Summary

The learning styles component of the San Jose State University Teacher Corps Project (Cycle Twelve) was described and the research base for the training of the Rogers School teachers in the use of six "classroom management schedules" designed to match the behavioral characteristics of various types of students was referenced. The treatment schedules were described in detail and the results of their application by classroom teachers in eight case studies were presented and discussed.

The findings illustrated the utility of the computer-assisted feedback system developed in the Teacher Corps Project, the effectiveness of the CASES-based classroom management schedules in fostering behavioral change, and the usefulness of the CASES Style scores in documenting the learning styles of the case study children.

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